

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Advanced Television Systems	)	MB Docket 87-268
And Their Impact upon the	)	
Existing Television Broadcast	)	
Service	)	
	)	
(Wilmington, Delaware)	)	

TO: Office of The Secretary

**PETITION FOR RECONSIDERATION**

WHYY, Inc. (WHYY), through its attorneys and pursuant to Section 1.106 of the Commission's rules hereby seeks reconsideration of the technical facilities allotted to Station WHYY-DT, Wilmington, Delaware, in the DTV Table of Allotments adopted in the Seventh Report and Order ("Seventh R&O"), FCC 07-138, released August 6, 2007.<sup>1</sup> In support thereof, the following is shown:

1. WHYY is a non-profit Section 501(c)(3) organization that has been serving the Delaware Valley with public broadcasting services for over 50 years. WHYY inaugurated noncommercial radio service in 1954, and followed with television in 1957. Like other public broadcast entities, WHYY is dependent on grants and its own fund-raising activities to operate its many other educational and cultural services, including the broadcast operations of Stations WHYY-FM, Philadelphia, Pennsylvania; WHYY-TV, Wilmington, Delaware; and Station WDPB(TV), Seaford, Delaware.

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<sup>1</sup> The Seventh R&O was published in the Federal Register on September 26, 2007. 72 Fed. Reg. 54720. Accordingly, the deadline for petitions for reconsideration of the decision is October 26, 2007, and therefore this Petition has been timely filed.

2. WHYY has been a pioneer in digital television services. Station WHYY-DT was activated under special temporary authority in May 2000, as the 18<sup>th</sup> Public Broadcasting Service (PBS) member station to initiate digital service. WHYY has been actively involved in the development of numerous digital broadcasting and communications activities, including datacasting and emergency services.<sup>2</sup> As recently as yesterday, October 25, 2007, WHYY and the Philadelphia Mayor's Commission on Technology announced a partnership and kicked off a campaign to help Philadelphia residents understand Digital Television and their options with the transition.<sup>3</sup>

3. Completing the digital transition for its stations is one of WHYY's highest priorities, and the DTV Table of Allotments has posed opportunities and limitations to WHYY which have become apparent only as it planned for its ultimate digital facility. Because its temporary digital operations have been out-of-core, it was always apparent that WHYY would return Station WHYY-DT to its current analog Channel 12. What was not clear until planning was substantially underway was that the Commission failed to provide WHYY with a digital channel with parameters that would allow the replication of analog service area to which WHYY certified when filing its Form 381.<sup>4</sup> Although WHYY did not participate earlier by filing comments in response to the Seventh Notice of Proposed Rulemaking in this docket, it has been active in other Commission DTV

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<sup>2</sup> See "Comments of the Association of Public Television Stations and Public Broadcasting Service" filed August 15, 2007, pp. 3-4 in connection with In re Third Periodic Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Notice of Proposed Rulemaking, MB Docket No. 07-91, FCC 07-70 (rel. May 18, 2007) ("Third Periodic Review").

<sup>3</sup> See the attached joint press release "Philadelphia and WHYY Prep City for Digital TV Transition" (Exhibit A).

<sup>4</sup> FCC File No. BCERET - 20041102AIH

dockets, and so believes the public interest compels acceptance of this Petition for Reconsideration.<sup>5</sup>

4. As demonstrated in the attached Engineering Exhibit, the channel allotted to Station WHYY-DT would be authorized an ERP of 9.9 kW at 308 meters on the presently licensed analog tower with a directional antenna pattern (FCC ID 74622) at deviation with the currently licensed NTSC directional antenna (FCC 18762). This fails to match the allotted analog coverage to which WHYY certified as its digital commitment. WHYY proposes instead parameters of 12.5 kW, utilizing antenna pattern 18762, and with the HAAT remaining at 308 meters. WHYY believes these minimal allotment changes will meet the de-minimis standard for caused interference.

5. Importantly for WHYY and the public that it serves, the requested change in parameters will allow WHYY to use the antenna currently providing Channel 12 analog service for DTV, on a schedule that will permit a “flash-cut” transition for the February 19, 2009 deadline. Simultaneously, WHYY will be preparing for the fabrication, testing and manufacture of a new and improved antenna to replace the existing antenna, which will be sixteen years old in 2009. WHYY cannot initiate that process until the channel allotment is determined as a final matter, as well as the application procedures to be decided in the Third Periodic Review. WHYY anticipates that it will be able to place the replacement antenna into service in the 2009-2010 time frame. Without the allotment change, WHYY will be forced to substantially curtail its digital service area when first implemented, or to spend twice on the fabrication, testing, manufacture, delivery and installation of a temporary digital antenna, a cost of approximately \$350,000 which would be better spent on WHYY’s other public services.

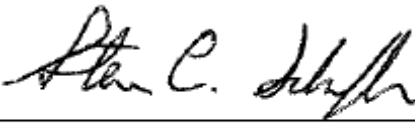
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<sup>5</sup> Section 1.1106(b)(1) of the Commission’s rules.

WHEREFORE, for the foregoing reasons, WHY Y requests that the final DTV Table of Allotments be amended as proposed.

Respectfully submitted,

WHY Y, Inc.

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**WHYY INCORPORATED**

**PHILADELPHIA, PA**

**WHYY-TV/WHYY-DT**

**WILMINGTON, DELAWARE**

**FCC Facility ID #72338**

**ENGINEERING EXHIBIT IN SUPPORT OF A  
PETITION FOR RECONSIDERATION IN MM DOCKET 87-268**

**October 26, 2007**

**WHYY INCORPORATED**  
**PHILADELPHIA, PA**  
**WHYY-TV/WHYY-DT**  
**WILMINGTON, DELAWARE**  
**FCC Facility ID #72338**

**ENGINEERING EXHIBIT IN SUPPORT OF A**  
**PETITION FOR RECONSIDERATION IN MM DOCKET 87-268**

This Engineering Exhibit has been prepared for WHYY, Incorporated (“WHYY”) in support of a Petition for Reconsideration (“PETITION”) in MM Docket 87-268 regarding the post transition facilities proposed by the Commission for WHYY-DT.

**BACKGROUND**

WHYY operates public television stations WHYY-TV on Channel 12 and companion public digital public television station WHYY-DT under experimental authority. With its FCC Form 381 filing, WHYY has certified that it will operate its post-transition station based on its allotted replication facilities.

In the 7<sup>th</sup> R&O and 8<sup>th</sup> FNPRM in Docket 87-268 in Appendix B, the Commission proposed that WHYY-DT, on Channel 12, would be authorized an ERP of 9.9 kW at 308 meters on the presently licensed analog tower with a directional antenna pattern (FCC ID 74622) at deviation with the currently licensed NTSC directional antenna (FCC 18762)<sup>1</sup>.

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<sup>1</sup> WHYY-TV has operated for its currently licensed site with a directional antenna for many years as a result of an Agreement with the then current Licensee of co-channel WNBK-TV (now WBNG-TV) in

Table 1 shows a tabulation of both the presently licensed (18762) NTSC antenna and the proposed directional antenna from Appendix B (74622) for WHYY-DT on Channel 12. Even including the modest 1 dB power increase, the differences in the field of the azimuth patterns on most bearings are less than 2 dB. 2 dB is a very small change in power and is far less than the normal propagation variations that occur at even modest distances from the transmitter.

This office, with the help of Techware, Incorporated conducted a study regarding possible changes to WHYY-DT12 post transition in light the fact that the short spaced condition with Binghamton, NY would be eliminated<sup>2</sup>. As part of the study, and shown in the attached Figure 1, the facilities proposed for WHYY-DT on channel 12 of 9.9 kW, antenna ID 74622, and HAAT of 308 meters does not replicate the presently licensed WHYY-TV, Channel 12 NTSC signal F(50,50) 56 dBu Grade B contour. As also shown in Figure 1, if WHYY-DT on channel 12 were to operate at 12.5 kW EP and with the presently licensed analog antenna (FCC 18762), the proposed F(50,90) 36 dBu DTV service contour exactly matches the presently licensed analog Grade B.

Therefore we believe that the proposed facilities for WHYY-DT as listened in Appendix B, should be changed to reflect this analog service replication. The requested parameters are 12.5 kW, utilizing antenna pattern 18762, and with the HAAT remaining at 308 meters. Based on the Longley-Rice study previously completed investigating much higher power for WHYY-DT on Channel 12, we also believe that these minimal changes will meet the de-minimis standard for caused interference.

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Binghamton, NY whom with WHYY-TV was short spaced. We note that after the transition, Channel 12 will be vacated in Binghamton per the information in Appendix B.

<sup>2</sup> The Longley-Rice Study, with the interference flag tolerance set to zero, showed no increased interference over 0.44% to any other DTV facility with the exception of WWPX with considerably more power over the changed azimuths than the slight differences proposed herein.

**TABLE 1**  
**WHYY-DT 12**

**ANT ID**

**18762**

Number 1

ERP=

**9.9**

kW

**74622**

Number 2

ERP=

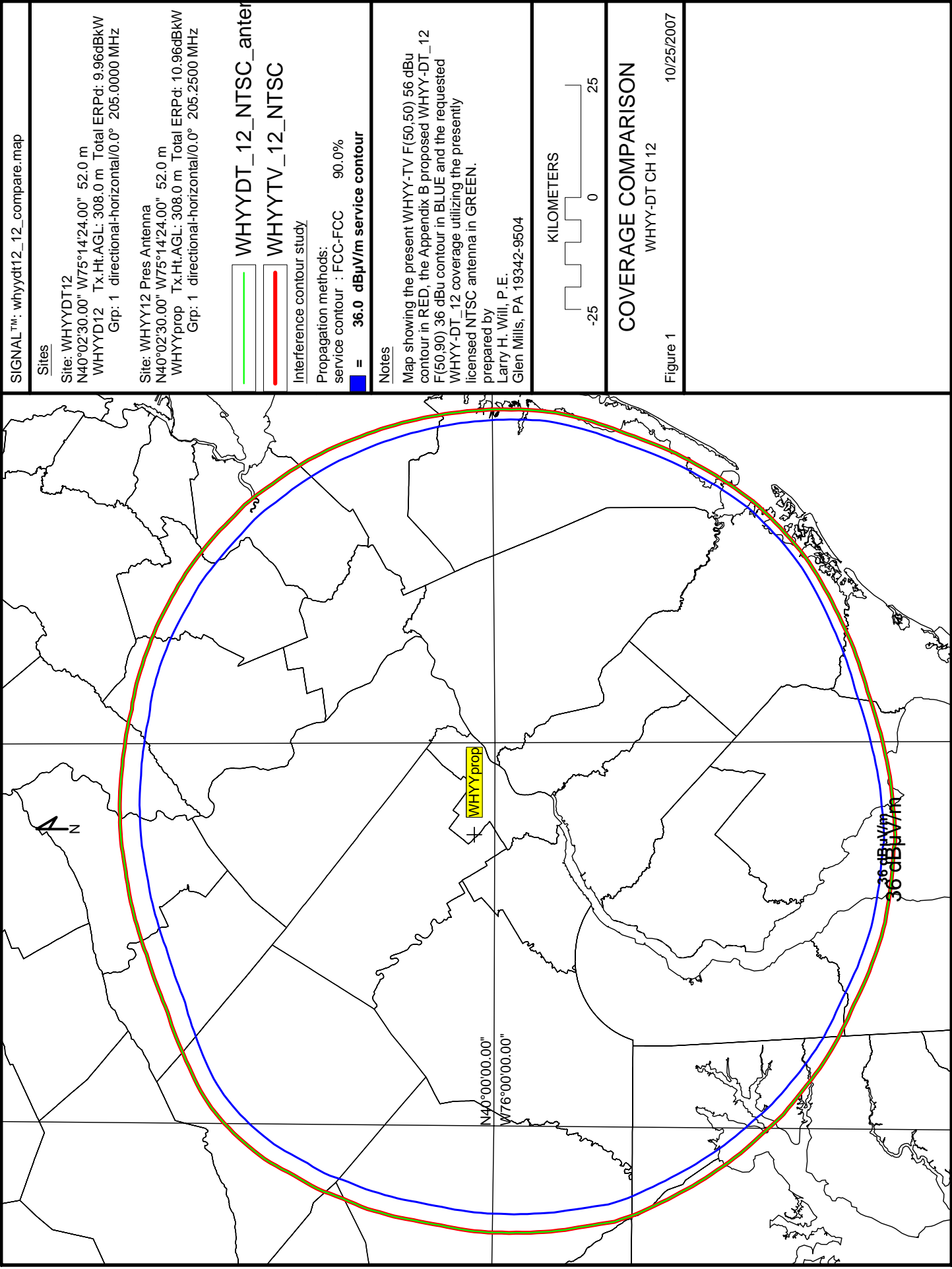
**12.50**

kW

**10 Degree**

Angle	Field 1	Field 2	ERP1 (kW)	ERP1 (dBk)	ERP2 (kW)	ERP2 (dBk)	dB CHANGE
0	0.325	0.386	1.05	0.194	1.86	2.701	2.51
10	0.347	0.41	1.19	0.763	2.10	3.225	2.46
20	0.387	0.453	1.48	1.711	2.57	4.091	2.38
30	0.476	0.550	2.24	3.508	3.78	5.776	2.27
40	0.586	0.676	3.40	5.314	5.71	7.568	2.25
50	0.662	0.764	4.34	6.374	7.30	8.631	2.26
60	0.719	0.818	5.12	7.091	8.36	9.224	2.13
70	0.812	0.893	6.53	8.147	9.97	9.986	1.84
80	0.866	0.924	7.42	8.707	10.67	10.283	1.58
90	0.911	0.948	8.22	9.147	11.23	10.505	1.36
100	0.955	0.978	9.03	9.556	11.96	10.776	1.22
110	0.927	0.950	8.51	9.298	11.28	10.524	1.23
120	0.957	0.970	9.07	9.575	11.76	10.705	1.13
130	1.000	1.000	9.90	9.956	12.50	10.969	1.01
140	0.941	0.952	8.77	9.428	11.33	10.542	1.11
150	0.852	0.882	7.19	8.565	9.72	9.878	1.31
160	0.802	0.842	6.37	8.040	8.86	9.475	1.44
170	0.815	0.857	6.58	8.180	9.18	9.629	1.45
180	0.852	0.891	7.19	8.565	9.92	9.967	1.40
190	0.849	0.900	7.14	8.535	10.13	10.054	1.52
200	0.855	0.917	7.24	8.596	10.51	10.216	1.62
210	0.889	0.962	7.82	8.934	11.57	10.633	1.70
220	0.889	0.990	7.82	8.934	12.25	10.882	1.95
230	0.853	0.964	7.20	8.575	11.62	10.651	2.08
240	0.838	0.959	6.95	8.421	11.50	10.605	2.18
250	0.819	0.948	6.64	8.222	11.23	10.505	2.28
260	0.731	0.852	5.29	7.235	9.07	9.578	2.34
270	0.685	0.797	4.65	6.670	7.94	8.998	2.33
280	0.637	0.737	4.02	6.039	6.79	8.318	2.28
290	0.551	0.634	3.01	4.779	5.02	7.011	2.23
300	0.491	0.566	2.39	3.778	4.00	6.025	2.25
310	0.439	0.509	1.91	2.806	3.24	5.103	2.30
320	0.382	0.447	1.44	1.598	2.50	3.975	2.38
330	0.322	0.382	1.03	0.113	1.82	2.610	2.50
340	0.307	0.366	0.93	-0.301	1.67	2.239	2.54
350	0.315	0.375	0.98	-0.077	1.76	2.450	2.53





**Media Inquiries:**Lauren Sullivan at WHYY, [lsullivan@whyy.org](mailto:lsullivan@whyy.org), 215.351.2066**October 22, 2007****Philadelphia and WHYY Prep City for Digital TV Transition**

The Mayor's Commission on Technology (MCOT) is hosting a briefing Thursday, October 25<sup>th</sup> at 12 noon for city council members and invited guests to provide information on the digital television transition, the low cost digital to analog converter box solution and the federal rebate program to financially assist individuals to ensure access to broadcast TV services. A consumer education plan developed by WHYY's Chief Technology Officer, Bill Weber and Carole I. Smith, MCOT's Executive Director to inform all Philadelphia households will also be presented. "Digital television is a clear example of the extent to which the convergence of new technologies is impacting the public," said Carole Smith. "Our briefing will provide Council members with information and resources to ready citizens for this transition and take advantage of the opportunities it affords."

The briefing will follow the morning city council session where a resolution to recognize this important effort will be presented. The resolution will honor the partnership between MCOT and WHYY to create a community awareness plan ensuring that the City of Philadelphia's most vulnerable groups are prepared for the transition from analog to digital television in February of 2009. Francine E. Jefferson, Ph.D., Consumer Education Manager, DTV Converter Box Coupon Program, National Telecommunications and Information Administration (NTIA), U.S. Department of Commerce and Pam Slipakoff, Chief of Staff, Consumer & Governmental Affairs Bureau, Federal Communications Commission will assist in the briefing.

The Digital Television Transition and Public Safety Act of 2005 requires full-power television stations to cease analog broadcasts and switch to digital after February 17, 2009. The Act also authorizes NTIA to create the Digital-to-Analog Converter Box Coupon Program. The Converter Box Program will enable consumers to continue using analog televisions for free, over-the-air broadcasts after February 17, 2009, when stations convert to all-digital signals. All U.S. households may request up to two, \$40 coupons to be used toward the purchase of up to two, digital-to-analog converter boxes, starting January 1, 2008, by calling 1-888-DTV-2009.

Prior to February 17, 2009, consumers receiving their programming "over the air" with an analog television will need to make one of three choices about how to watch TV after that date: (1) purchase a digital converter for their existing analog TV; (2) subscribe to and check with their cable or satellite providers; or (3) purchase a new television with a digital tuner.

Digital television provides consumers with a clearer picture, more programming and frees up much needed spectrum for advanced wireless broadband services and interoperable communications among emergency first responders.

For more information about the digital transition and the Coupon Program, go to [www.ntia.doc.gov/dtvcoupon](http://www.ntia.doc.gov/dtvcoupon).

"Philadelphia residents should not be caught by surprise by the digital television transition on February 17, 2009, which is less than 500 days away," said Bill Webber, Chief Technology Officer at WHYY. "This meeting is a ground breaking example of leaders in Philadelphia government, and the Public Broadcasting Industry working together to educate consumers on the transition to digital TV."

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*WHYY is what a diverse community has in common. WHYY, through television, radio and other communications services, makes our region a better place, connecting each of us to the world's richest ideas and all of us to each other.*

WHYY, Inc.

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